THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LAWRENCE C. MUSCHIATTI and I-HWA LEE

Appeal No. 1995-1915
Application No. 08/117,846[1]

ON BRIEF

Before WILLIAM F. SMITH, JOHN D. SMITH and HANLON, Administrative Patent Judges.

HANLON, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 6-8. Claim 5 is also pending but has been withdrawn

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[1] Application for patent filed September 7, 1993.

from consideration by the examiner. Claim 6 is illustrative of the subject matter on appeal and reads as follows:

6. A multi-layer composition comprising:

a) a barrier layer; and

b) a structural layer comprising:

i) about 79 to about 99 weight parts thermoplastic crystallizable or crystalline polyester base resin having a glass transition temperature (“Tg”) of at least about 50°C, and a melting point of at least about 150°C and an intrinsic viscosity (IV) of at least about 0.5; and

ii) an alkali metal salt of a polyester polymer in an amount sufficient to provide the structural layer with about 6.5×10^{-7} gram-atoms to about 15×10^{-6} gram-atoms of active alkali metal per gram of polyester defined in i).

The references relied upon by the examiner are:

Moritani et al. (Moritani)	4,929,482	May 29, 1990
International application (Sublett)	WO 90/01042	Feb. 8, 1990

The sole issue[2] in this appeal is whether claims 6-8 were properly rejected under 35 U.S.C. § 103 as unpatentable over the combination of Moritani and Sublett.[3]

Discussion

Claim 6 is directed to a multi-layer composition comprising a barrier layer and a structural layer. The structural layer comprises a thermoplastic crystallizable or crystalline polyester base resin and an alkali metal salt of a polyester polymer.

Moritani discloses a heat-resistant container comprising an ethylene-vinyl alcohol copolymer layer and a crystalline polyester layer. The crystalline polyester resin layer comprises polyethylene terephthalate having a crystallization accelerator incorporated therein. According to Moritani, the crystallization accelerators include (col. 2, lines 56-63):

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[2] The rejection of claims 6-8 under 35 U.S.C. § 112, second paragraph, has been withdrawn. See Paper No. 18.

[3] According to appellants, "the rejected claims stand or fall together" (Brief, p. 2). Therefore, for purposes of this appeal, claims 7 and 8 stand or fall with the patentability of independent claim 6.

> [S]odium salts or potassium salts of organic acids having from 7 to 30 carbon atoms, and sodium salts or potassium salts of organic polymers having carboxyl groups, such as sodium stearate, sodium benzoate, sodium salt of ethylene-methacrylic acid copolymers and sodium salt (fully or partially neutralized) of styrene-maleic anhydride copolymer.

According to the examiner, Moritani fails to disclose a polyester polymer salt falling within the scope of claim 6 (Answer, p. 3). However, as set forth in the statement of the rejection at page 4 of the Answer, the examiner relies on the following teaching in Sublett to establish the obviousness of the claimed polyester polymer salts in the multi-layer composition of claim 6:[4]

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[4] We note that in response to appellants' arguments, the examiner states (Answer, p. 5):

> Appellants method of forming polyester salt nucleating agents and combining them with other polyesters is also disclosed by Sublett. A citation in Sublett's background section to US 4705844 to Espenschied describes formation of the same type of alkali-metal/polyester nucleating agent that is later combined with non-nucleated polyesters to form rapid crystallization (p. 5 [sic, 3], ¶ 1).

However, since the examiner neither relied on this portion of Sublett nor U.S. Patent No. 4,705,844 to Espenschied in the statement of the rejection, the teachings contained therein are not before us for review. See In re Hoch, 428 F.2d 1341,

(continued...)

> Sublett teaches that PET copolymers formed by adding 25-5000 ppm sodium or potassium, prior to polymerization, will form a final PET copolymer composition with improved crystallization rates from the glassy state during thermoforming due to polymer salts formed in situ (p. 5, [lines] 10-30). It is these polymer salts that act as nucleating agents with the other polymerized PET at the thermoforming step. The reference sets forth that crystallization rates of ordinary PET copolymers are usually too slow although the physical properties of such copolymers are highly desirable in such applications (p. 3, [lines] 17-31). [Emphasis added.]

In contrast to this teaching in Sublett, the invention of claim 6 requires a "blend" of a thermoplastic crystallizable or crystalline polyester base resin and an alkali metal salt of a polyester polymer. Appellants argue (Brief, p. 3):

> The PCT reference [Sublett] is distinguishable, because it is directed to *copolymerizing* terephthalate salts into a PET polymer. The present invention is directed to *blending* polyester salts with a polyester polymer. Applicant's blending is not an obvious variation of the PCT reference's copolymerizing, because the PCT reference specifically teaches against blending . . . .
>
> Sublett expressly teaches (p. 4, lines 13-16):
>
> Adding the terephthalate salts to an already-formed copolymer would cause breakdown of the polymer, resulting in an undesirable decrease in molecular weight and inherent viscosity.

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[4](...continued)
1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970).

Based on this teaching in Sublett, we find that one having ordinary skill in the art would have been discouraged from adding the polyester salts disclosed in Sublett to the polyethylene terephthalate disclosed in Moritani. See Gillette Co. v. S.C. Johnson & Son, Inc., 919 F.2d 720, 724, 16 USPQ2d 1923, 1927 (Fed. Cir. 1990) (the closest prior art reference "would likely discourage the art worker from attempting the substitution suggested"). For this reason, the rejection of claims 6-8 under 35 U.S.C. § 103 as unpatentable over the combination of Moritani and Sublett is reversed. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992) (the examiner bears the

initial burden of establishing a prima facie case of unpatentability).

REVERSED

WILLIAM F. SMITH Administrative Patent Judge	)	
JOHN D. SMITH Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ADRIENE LEPIANE HANLON Administrative Patent Judge	)	

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